This paper addresses the impact of the Scandinavian settlements in England in the ninth and tenth centuries, and the role that ethnic identity and affiliation played in the society of the so-called Danelaw. It is argued that ethnic identity was not a constant factor, but one that only became relevant, at least in the evidence available to us, at certain times. It is suggested that the key to understanding expressions of ethnicity lies in the absorption of new ruling elites in northern and eastern England, and in subsequent political manoeuvring, rather than in the scale of the Scandinavian settlement. Indeed, the scale of the settlement does not easily explain most of our evidence, with the exception of some of the linguistic data. This paper stresses the importance of discussing the Scandinavian settlements not simply by reference to ethnic factors, but within the social and political context of early medieval society.

Opinion has famously been divided over how long the Scandinavian settlers in northern and eastern England remained a distinctive element in the society of those regions, and about the means and speed of their eventual assimilation. This paper reviews the evidence for the impact that the Scandinavian settlements had on this region, examines the ways in which the settlers and indigenous populations responded to each other, and analyses the various social and ethnic identities that emerged in the so-called Danelaw in the later ninth and tenth centuries. It is suggested here that the key to understanding the ethnic identities constructed in the Danelaw and much, although not all, of the surviving documentary, linguistic and archaeological evidence relating to the Scandinavian settlement is the absorption of a new elite into the societies of northern and eastern England rather than the scale of the settlement, which has been the traditional focus of scholarly attention.¹

Ethnicity is a subject that has received much scholarly attention of late. It is now widely accepted that ethnic identity in early medieval Europe was not innate and unvarying, but was a subjective process by which individuals and groups identified themselves and others within specific contexts, on the basis of a shared and subjective sense of common interests.² There have been numerous recent challenges both to the notion that ethnic groups can be objectively defined by their cultural, linguistic and racial distinctiveness, and to the belief that they can be identified by sharply delineated distributions of artefacts.³ Ethnic groups may be characterized by a distinct language, culture, territory or religion, but these characteristics are not necessary or predictable.⁴ In re-thinking identity in the Danelaw, it is possible to show that ‘Danish’ identity was not a given, but was socially and culturally constructed in the process of settlement, deployed at certain times and places in particular contexts, and expressed in different ways in a variety of media. Ethnicity is not, however, the only relevant paradigm for explaining the impact of the Scandinavian settlements and their material record. Also important, as we shall see, were factors relating to political control and power struggles, old and emergent regional identities, lordship and ‘class’, as well as family and gender relations.

**Defining the Danes: the use of ethnic labels**

References to ‘Danes’ in the *Anglo-Saxon Chronicle* and other broadly contemporary written sources, and the existence of the term ‘Danelaw’ to describe the regions of Scandinavian settlement, have formed the basis for many inferences about the nature of that settlement and about the ethnic identities of the inhabitants of northern and eastern England in the tenth and eleventh centuries. It was traditionally assumed that the

---


settlers and their descendants remained a distinctive and clearly identifiable element within the society of the Danelaw well into the eleventh century, that they were a group naturally disposed to support later Danish invaders under Swein Forkbeard and Cnut, and that this rendered the Danelaw a society riven by ethnic differences between Danes and English. Yet many factors determined the choice of terminology employed in chronicles and legal documents to describe people and regions, let alone contemporary responses to subsequent Scandinavian assaults. Few would now discuss the Scandinavian settlements in such an outmoded fashion, but current alternative suggestions that the settlers simply, and speedily, ‘disappeared’ into indigenous society, or that they were rapidly integrated and assimilated, do not do justice to the available evidence, as we shall see.

It is certainly true that the Anglo-Saxon Chronicle often recognized the raiders of the ninth and tenth centuries as Danish, and in the tenth century it was occasionally inclined (for example, in reporting the events of 942) to distinguish between the Danes and the Norsemen, those invaders who had come from Dublin. It is also true that tenth- and early eleventh-century English kings sometimes noted that their subjects included ‘Danes’, but they did not do so consistently and, where distinctions are drawn between different members of their kingdom (as in charters issued by King Eadred in the 940s, or in a charter issued by Æthelred II in 1013), it is often with reference to the Anglo-Saxons or English, Northumbrians, pagans and Britons, rather than Danes. The term ‘Danelaw’ is first recorded c.1008, and is used in legal codes of the eleventh and twelfth centuries to distinguish a region in which Danish (as opposed to Mercian or West Saxon) law was thought to prevail, although there is, in fact, little about ‘Danelaw’, beyond its terminology, that can be clearly shown to have Scandinavian origins. Moreover, the


7 ‘The Danes were previously subjected by force under the Norsemen’: J. Bately (ed.), The Anglo-Saxon Chronicle, MS A (Cambridge, 1986), s.a. 942. See also s.a. 937 where the term Norsemen is used to describe the invaders from Dublin. For a discussion of the terms used to describe the invaders and raiders, see A. Smyth, ‘The Emergence of English Identity, 700–1000’, in A. Smyth (ed.), Medieval Europeans: Studies in Ethnic Identity and National Perspectives in Medieval Europe (London, 1999), pp. 24–52, at pp. 32–5.


term is not used consistently, and terms such as ‘Northumbria’ or ‘the northern people’ (Norðleoda) and apparently new shire names and political and administrative groupings (such as the territory of the Five Boroughs and, on one occasion in 1015, the Seven Boroughs) predominate. Even the complex events in the North during the late 940s and early 950s, when political support wavered between King Eadred of Wessex and Olaf Sihtricsson and Erik Bloodaxe, are described in the Anglo-Saxon Chronicle with reference to the behaviour of the ‘Northumbrians’, and ethnic factors and explanations are not explicitly invoked. During the Scandinavian attacks of the later tenth and earlier eleventh centuries, the various regions of England where events occurred are described by regional and shire names rather than by reference to the ethnic identity of their inhabitants.10

Two prominent, and contrasting, examples of the recognition of a Danish element within English society come from law-codes issued by Edgar and Æthelred II, and they have formed an important part of the argument concerning contemporary ethnic identities. In the mid-tenth century Edgar legislated in his fourth law-code (962 x 3, or possibly the 970s) that ‘there should be in force among the Danes such good laws as they best decide on’.11 Although it might be thought that Edgar was addressing those inhabitants of his kingdom who were of Danish descent, it is, in reality, difficult to imagine that the descendants of the earliest settlers were still identifiable after nearly a century. The term might have been intended to describe more recent settlers, although the most recent ‘Scandinavian’ assaults on England did not come directly, if at all, from Denmark, but rather from Dublin or Norway.12 On first principles, then, it is difficult to understand which ‘Danes’ Edgar might have meant. This law-code is not, however, a commentary on contemporary ethnic relations, and the particular clause in question needs to be discussed in a wider context and the political background of the legislation considered. Regional interests limited Edgar’s authority over the northern regions of his kingdom, and the clause referring to the Danes may have been a measure designed to help him maintain a semblance of political unity both by recognizing regional legal traditions and by acknowledging the limitations of his authority.13 Indeed, the political and legal activities of all southern kings from the mid-tenth century were tempered by regional interests, reflected in the not uncommon appointment to positions of authority in northern England of men who had interests in the North and the north Midlands as well as in the South, in


Early Medieval Europe 2002 11 (1) © Blackwell Publishers Ltd 2002
order to ensure both their loyalty and the acceptance of their appointment by the northern lords. The clause was perhaps also a recognition of the support Edgar had received between 957 and 959 from the magnates of those regions where he ruled before succeeding to the whole kingdom on the death of his brother Eadwig, perhaps serving as a confirmation of his intention to honour their privileges. In this general context Edgar’s separate legal provision for the areas of Scandinavian settlement may have derived as much from recognition of the regionalism within England as a whole as from a perceived binary division — between ‘Danes’ and ‘English’ — north of the Thames. The use of ethnic terminology must stem both from the fact that some of the leading magnates in the region were recognizably of Danish origin and from the connivance of indigenous northern lords with the settlers, alongside a general perception of Danish cultural influence in the form of legal and administrative terminology and the adoption of Scandinavian material culture. Whatever the case, the clause was addressed to the lords of northern England who would put the law into effect, and offers us nothing on the rest of the inhabitants of the North.

Æthelred II also legislated for the northern part of his kingdom in 997, in a law-code issued at Wantage (Berks.). This code is distinguished from a contemporary code issued at Woodstock (Oxon.), both by its subject matter and by the use in the Wantage code of much Scandinavian terminology, clearly reflecting local usage, suggesting that it was probably drawn up by men familiar with the situation in northern England. Although the Wantage code was royal law, and appears to have introduced some rules and practices from Wessex into northern England, it was also heavily influenced by regional interests and preoccupations. However, we cannot conclude that the Wantage code indicates a kingdom divided by ethnic factions which the king was able to recognize in objective legal terms, given that it seems much more likely to have been a local product created by men from the North, although under the influence of royal policy. As Patrick Wormald has observed, ‘no West Saxon king or council could have produced a code so thoroughly Scandinavian in form and content’, and we have to remember that law was as much defined by those who had to implement it as by royal pronouncement and the letter of its written form.

16 Keynes, ‘The Vikings in England’, p. 73.
17 Liebermann, Die Gesetze der Angelsachsen, I, 228±33.
Although other interpretations of these law-codes issued by Edgar and Æthelred can be, and have been, offered, it must be recognized that law-codes have a political and social dimension that renders any straightforward reading of the significance of ‘ethnic’ labels for understanding inter-personal relations ‘on the ground’ especially complex. One implication of the law-codes appears to be that the elites (of whatever origin) of eastern England and Northumbria were determined to maintain some semblance of regional autonomy; they were accordingly courted through acknowledgment of their regional identity, which was occasionally expressed in ‘ethnic’ terms. Regional politics and the relationship of various regions to the crown remained important, and were complicated, rather than superseded, by responses to the Scandinavian settlement.19

Ethnic dualism and unity came to be a template for political organization and negotiation between the regional elites and the kings of England.20 It was extensively used in the time of Archbishop Wulfstan II of York, as in the so-called ’Laws of Edward and Guthrum’ which, while claiming to be an agreement made between Alfred, Edward the Elder and the Viking leader Guthrum, was a code written in the early eleventh century by the archbishop, and through the use of the term Danelaw from at least 1008.21 Yet the use of the Danish label was as likely to have been influenced by regional interests and by the renewed Scandinavian threat as by the weight of numbers of Scandinavian settlers several generations earlier.

Although the political use of ethnic terminology in the early Middle Ages is a much debated topic, it is not in doubt that the ethnic language of the law-codes reveals little about the self-identification and inter-personal relations of most of the inhabitants of northern and eastern England. In addressing this issue we cannot appeal to chronicle evidence for the allegiances displayed in the face of renewed Scandinavian attacks from the later tenth century. The activities of these raiders may have been encouraged by earlier Scandinavian settlement in those regions, but Swein Forkbeard’s attempts to conquer England from his base at Gainsborough (Lincs.) in 1013 received regional rather than discernibly ‘Danish’ support; the starting point for his attack was likely to have been determined by its distance from the heartlands of the English

kings and the disaffection of northern nobles from the king. This, as much as an expectation of ethnic loyalties, may explain why Swein desisted from doing great damage until after he had crossed Watling Street. Indeed, Watling Street was later used again as a marker in political negotiation when the northern rebels of 1065 halted their march south at Northampton where they began their negotiations—it was not only Danes who recognized the political importance of that boundary.\textsuperscript{22} It should also not be overlooked that the citizens of ‘English’ Oxford and Winchester and those in the vicinity of Bath also quickly submitted to Swein, suggesting that ethnic affinity was not the only factor which determined his support, if, indeed, it was relevant at all.\textsuperscript{23} If we wish to assess the impact of the earliest Scandinavian settlements by reference to the political events of the later tenth and early eleventh century we have to pay attention to pre-existing regional identities and issues, which are reflected not least in the continuing recognition in tenth-century charters and law-codes that England consisted of, among other groups, the ‘Northumbrians’. Although united under a single king, later Anglo-Saxon England was also divided by factionalism. It is notable, however, that this factionalism was more visible and troublesome in times of dispute over royal succession, and over the appointment of earls, than in times of Scandinavian attacks, and the politics of later Anglo-Saxon England display a regional rather than an ethnic character.\textsuperscript{24}

The political and military events of the tenth and eleventh centuries do not lend much support to the idea that there was a clear and innate ‘ethnic’ difference between Danes (the descendants of earlier settlers) and English north of Watling Street, a notion that depends upon assumption and circular argument. It is, however, possible that regional disputes and affiliations, political manoeuvring and conquest, as well as disputes over land may have, from time to time, stirred memories of the diverse ancestry of inhabitants of parts of England, creating or reviving ethnic differences.\textsuperscript{25} Accusations of ‘closet’ Danish sympathies, such as that made in the early twelfth century by ‘Florence’ of Worcester who blamed the failure of the English army to oppose the Danish fleet that arrived in the Humber in 993 on the Danish ancestry of three of its generals, do not necessarily prove that ethnic sympathies with the Danish raiders ran deep; they might, however, suggest that in times of


\textsuperscript{25} For general discussion of these issues in the early medieval context, see P. Geary, ‘Ethnic Identity’, esp. pp. 25–6; Innes, ‘Danelaw Identities’, pp. 83–5 discusses the evidence of the \textit{Liber Eliensis} for local allegiances at times of disputes over land.

© Blackwell Publishers Ltd 2002 Early Medieval Europe 2002 11 (1)
conflict any discernible difference about enemies and traitors might be seized upon and framed in ethnic terms. References to Danes and to the Danishness of northern and eastern England are, in fact, relatively rare once settlement began, generally only occurring in some legal contexts and during times of political or military conflict, and are hardly made at all between c.920 and 990. Moreover, it is not the descendants of Danish immigrants of the late ninth century who are generally known as Danes in written sources of the later tenth and eleventh centuries, but rather recent arrivals: merchants, disaffected Danish noblemen, mercenaries, troublemakers and enemies, individuals who were ‘out of place’ or causing trouble. When Æthelred II ordered the massacre of Danes in 1002, the only place where it can be shown to have put into effect was Oxford, a town far from the regions in which earlier Danish settlement had taken place. The Danes targeted by Æthelred do not seem primarily, if at all, to have been the descendants of earlier generations of settlers. Even if they had been, one can only guess at how his followers would have gone about identifying them (names? jewellery? hair styles?), and it is more likely that it was Danish merchants and mercenaries who were the intended victims. On the whole, as far as chroniclers and scribes were concerned, the inhabitants of the English kingdom were English, albeit distinguishable on the basis of their region of origin or abode. Sporadic references to Danes in charters, chronicles and law-codes and the existence of the Danelaw do not, at least in any simple way, demonstrate that northern and eastern England was inhabited from the late ninth to the eleventh centuries by groups who were normally perceived of as Danish, let alone by groups who regarded themselves as Danish.

We should not, however, conclude from this that the labels imposed on the laws of the region were not significant for those who lived in northern and eastern England. Adherence to a particular law-code was a significant component of social identity and may have been important in consolidating a sense of difference – sometimes expressed, and perhaps often felt, as ‘Danishness’ – among the tenth- and eleventh-century inhabitants of northern and eastern England, but this does not

28 Ibid.
30 Keynes, ‘The Vikings in England’, pp. 77–8; Stafford, Unification and Conquest, p. 66.
demonstrate a continuing alienation from ‘Englishness’. This identifying with the English nation and crown did not preclude people from having other allegiances or identities, and vice versa. This discussion is not meant to deny the existence of ethnic difference in northern and eastern England, but, as Susan Reynolds has also observed, we have to be aware that the written evidence is not as conclusive about such matters as is often assumed. It is important to be aware of the distinction between labels imposed by external commentators and the ways in which individuals and groups defined their own identity, and of the difference between the rhetoric of politics and personal experience.

Language and identity

Ethnic groups may be, although are not necessarily, defined by a common language or distinguished from other ethnic groups by linguistic difference. It is, indeed, notable that tenth- and eleventh-century commentators sometimes did distinguish the Danes on the basis of their language. In the late tenth century the chronicler Æthelweard referred to the translation of the body of Ealdorman Æthelwulf in 871 to the place called Northworthy, but in the Danish language Deoraby. Ælfric in his homily De Falsis Diis later drew comparisons between certain Classical and Scandinavian deities, and in doing so he observed of the god Mercury that ‘by another name he is called Óðinn in Danish’, and, in his discussion of the days of the week, he noted that the goddess Venus is called Fricg ‘in Danish’. Clearly, the two authors recognized Denisc as a distinct language and associated the speaking of Denisc with Danes. Furthermore, the linguistic distinctiveness of the Danes appears to have been most apparent to them in the onomastic sphere, and they recognized two distinct speech communities. However, these commentators were almost certainly discussing recent arrivals rather than the descendants of late ninth-century settlers. Nonetheless, the linguistic influence of the settlers was considerable even though Scandinavian did not remain a spoken language in the Danelaw indefinitely, as Scandinavian speakers eventually switched to speaking English, and it did not not

---

32 For discussion of the role of law in the construction of ethnic identities in other early medieval contexts, see, for example, Amory, ‘Ethnic Terminology in the Burgundian Laws’.
develop as a written language. Analyses of the reasons behind this 
linguistic influence have consistently pointed to it being a product of 
the enormous scale of the Scandinavian settlement. This may, indeed, be 
the case, although there is much debate among socio-linguists about 
whether a direct relationship between scale and impact is to be expected. 
Moreover, as Michael Barnes has noted, the problem with using analogy 
with better-understood periods of language contact and change is that 
‘language is a human activity – and human activity is, in the final 
analysis, unpredictable’. It is for linguists to address such issues, but it 
is nevertheless possible to ask questions of the linguistic evidence for 
historical purposes – in particular, what was the impact of speakers of 
different languages on each other during the ninth and tenth centuries 
and how was language used to signal aspects of identity and status?

Only c.150 Scandinavian terms occur in Old English sources, mainly 
in the technical vocabulary, but several thousand are recorded in Middle 
English sources of the later Middle Ages, although the greatest linguistic 
influence by the settlers clearly lay much earlier than this. It is not 
immediately clear why the authors of texts written in Old English 
should choose to use Scandinavian terms. It may reflect the influence of 
the author’s dialect, or familiarity with local usage, or it may have been a 
more conscious recognition of the status of Scandinavian within north-
ern elite society and an attempt to emphasize the differences of northern 
society. It is arguable that the technical nature of the borrowings into 
Old English may be compatible ‘with a socially superior, more presti-
gious status of Scandinavian in the Danelaw’. Such a situation could 
be accounted for by a small number of settlers but by contrast the

39 On the epigraphic evidence see R.I. Page, ‘How Long did the Scandinavian Language Survive 
the Conquest: Studies in Primary Sources Presented to Dorothy Whitelock (Cambridge, 1971), 
pp. 165–80; for general discussions of the influence of Old Norse on Old English, see J. Geipel, 
The Viking Legacy: The Scandinavian Influence on the English and Gaelic Languages (Newton, 
1971); B.H. Hansen, ‘The Historical Implications of the Scandinavian Element in English: A 
1999), I, 290–408, at pp. 326–6. I follow linguists here in referring to ‘Scandinavian’ rather than 
to Old Norse or Danish.


41 The importance of recognizing that when we discuss ‘languages in contact’ we really mean 
‘speakers of language in contact’ is made in A. McIntosh, ‘Codes and Cultures’, in M. Laing 
and K. Williamson (eds.), Speaking in Our Tongues: Proceedings of a Colloquium on Medieval 
Dialectology and Related Disciplines (Cambridge, 1994), pp. 135–7; see also Townend, ‘Viking 
Age England’.

42 Geipel, The Viking Legacy, p. 70; Hansen, ‘The Scandinavian Element in English’; Kastovsky, 
‘Semantics and Vocabulary’, pp. 320, 332–6; J. Hines, ‘Scandinavian English: a Creole in 


Scandinavian influence on Middle English suggests a large-scale settlement, and perhaps also a long period of coexistence of the two languages in contexts in which they enjoyed broadly equal prestige. It also betokens a great deal of social mixing – presumably in the form of intermarriage, trading, settlement and so on – and a combination of mutual intelligibility and bilingualism. Mutual intelligibility is, however, hard to determine, and an important factor would have been the social setting of interaction as much as the percentage of each others’ language that the settlers and the indigenous populations would have understood. In modern studies of contact between speakers of different languages, it has been shown that languages of communication (pidgin languages) may quickly emerge and that for subsequent generations this language may sometimes take on a life of its own (a so-called creole). Whether these linguistic developments did occur in the Danelaw has been a matter of great debate among linguists, but this debate need not concern us here, as the real key to using linguistic evidence for historical purposes lies in establishing the cultural and social function of language.

A recent paper by John Hines offers a useful model for addressing these issues. It is not, he suggests, difficult to explain the initial borrowings of basic Scandinavian vocabulary in the context of the military and political success of the Scandinavians in the earliest phases of settlement, as it was in the interests of the local populations to learn some of the language of the settlers. ‘Scandinavian English’ (understood to be ‘the variety of English language extensively marked by Scandinavian influence’) may then have served at this stage as a common medium of communication. As the tenth century progressed, the linguistic tide turned, and the settlers began to adopt English more extensively, as, indeed, they were to adopt many other aspects of indigenous culture. As Hines has put it, the resultant elaborate range of Scandinavian English ‘was produced as a deliberate act and was part of the particular instances of acculturation’. According to this model for language contact, the languages of the indigenous population and the settlers did not simply mark out each group as distinctive, but rather language was utilized for socially integrative purposes in the wider context of social mixing and as part of the creation of an Anglo-Scandinavian culture. There are,
however, alternative models, such as those that posit the long-term co-existence of two essentially monolingual groups, Scandinavians and English, who nonetheless had a high degree of mutual intelligibility, until the descendants of the settlers eventually shifted to speaking English. There are great difficulties in using linguistic evidence to throw light on social relations, and we have to remember that the languages people spoke did not necessarily determine their religion, political organization, allegiances or the material culture they adopted.

It is striking that whatever language or languages were spoken in northern and eastern England, the written languages, used in documents and on coins and, occasionally, on sculpture, seem to have been largely Old English and Latin, with Scandinavian runic inscriptions being comparatively rare. The leaders of the Scandinavian settlers seemingly adopted the writing system of the indigenous ruling groups, influencing its lexical content in the process, and this was another important factor in the acculturation of the settlers. The very writing system that a society adopts has much to reveal about the ways in which members of that society perceive themselves and wish to present themselves. Language may be as much an ‘act of identity’ as, for example, wearing a particular type of brooch, and as such was susceptible to manipulation. The linguistic evidence suggests that the settlers related to indigenous society in a series of complex and changing ways.

**Place-names and personal names**

There has been much debate about the significance of the great number of wholly or partially Scandinavian place-names in England. That they are largely limited to areas of documented Scandinavian settlement is not in dispute, but earlier attempts to use place-name distributions to chart the movements of armies, to indicate areas of colonization, to identify the precise locations where groups of incomers settled and to assess the scale of Scandinavian settlement simply have to be abandoned. It is now clear that the Scandinavian place-names recorded in Domesday Book were coined over a long period of time, and not just during the initial phases of settlement, although that is not to deny that the majority of those names were probably coined prior to the eleventh

---

50 Townend ‘Viking Age England’, pp. 89–101; see also Barnes, ‘Norse in the British Isles’.
51 Page, ‘The Epigraphical Evidence’.
53 Hines, ‘Focus and Boundary’, p. 58.
54 For a review, see Hadley, ‘Scandinavian Settlement’, pp. 71–5.
Factors such as the development of estate structures and the vagaries of record-keeping were important in determining the extent to which new Scandinavian place-names might be generated, required by lords and estate managers, or recorded by scribes. Moreover, excavation has shown that places once thought on the basis of their Scandinavian names to have been newly colonized by the Scandinavian settlers were, in fact, settled long before the later ninth century. It is also now thought that the density of Scandinavian place-names in some upland and wolds regions may be accounted for by an intensification of settlement in such regions in the later Anglo-Saxon period. As a result of this, settlements became detached from their parent settlements in the river valley areas, and new names were required for them; if this occurred at a time when Scandinavian naming elements were common, then this may explain the distribution of some Scandinavian place-names. We should not confuse the coining of place-names with the recording of those names. The fact that in Domesday Book and later sources different versions of the same name are recorded (e.g. Stainmore (Westmorland) Stān-móðr/Steinn-mór; Bleasby (Notts.) Blisetune/Bleseby), showing more or less English or Scandinavian influence, and in a few instances radically different names for the same place are recorded (e.g. Derby/Northworthy), reveals the extent to which different names for a place might circulate locally with the final version of a name being determined by scribes. It also reveals the fallacy of using place-names to discuss issues of ethnic separateness and identity. In short, the place-name distribution map is on its own far too blunt an instrument with which to trace the Scandinavian impact on England, and it is hazardous indeed to ‘read too much between the dots’.

It is not my intention to deny that the dense distributions of Scandinavian place-names in some regions may indicate areas of dense Scandinavian settlement, particularly where the Scandinavian elements overwhelm the indigenous name stock and where there is little evidence for the ‘scandinavianisation’ of earlier names. However, place-names also have much to reveal about relations between the settlers and the indigenous populations. The fact that names formed with the element -by (‘farmstead, settlement’) contain a high percentage of personal

58 Keynes, ‘The Vikings in England’, p. 64.
names as their first element does suggest contact with indigenous naming-practices and attitudes to land, since the combination of personal name first elements with -by, indicating the association of a person with a particular territory, if not the ownership of that land, is, by contrast, comparatively rare in Denmark.\textsuperscript{59} The combination of Scandinavian and English elements to form names is another indicator of the creation of place-names in the context of contact between settlers and indigenous populations, as is the presence of both Scandinavian and English place-names within the same estate. Estates apparently more or less continuously in ecclesiastical hands often reveal little Scandinavian influence upon their place-names, even where documentary and archaeological evidence suggests Scandinavian influence, perhaps revealing the importance of estate structure and management in determining the survival or alteration of names.\textsuperscript{60}

The place-name distribution map, generated on the basis of Domesday Book and later sources, is really a palimpsest of a series of changes to the place-name corpus. It was the product of the conscious and subconscious decisions made by the inhabitants of northern and eastern England, reflecting something of the changing cultural landscape, as groups retained, modified and created new names with reference to both old names and newly encountered names.\textsuperscript{61} The settlers and the local populations clearly influenced each others’ naming practices, and it is not necessary to suppose that people had to speak the language from which a name was drawn or to fully understand its etymology in order to use it; they needed only to recognize it as an appropriate name for a given place.\textsuperscript{62} The existence of different names, or different versions of names, for the same place may indicate the presence of ‘two separate speech communities independently referring to the same place by different names’.\textsuperscript{63} However, we ought not to overlook the fact that new place-names were coined and recorded for settlements and estates within the English-speaking community, often in response to changes in lordship which, it is fair to assume, may have been used simultaneously for a time.\textsuperscript{64} Thus, the existence of differing names for a place is not merely a result of two different ethnic groups coming into contact with


\textsuperscript{63} Townend, ‘Viking Age England’, p. 98.

each other, but is also a product of normal social and political factors within early medieval society.

The settlers and the indigenous populations also had a mutual influence on personal naming patterns, which is partly reflected in the existence of families whose members had both English and Scandinavian names.\(^{65}\) While the settlers may simply have started new fashions in nomenclature, their political ascendancy during parts of the tenth century may have encouraged people to align themselves and their children self-consciously with their new overlords.\(^{66}\) Equally, at least some of the settlers had good cause to adopt English names for socio-political reasons. The most famous example is Guthrum, the leader of a late ninth-century army who, upon baptism under the sponsorship of King Alfred, became known as Æthelstan, a name he used when he later minted coins in East Anglia.\(^ {67}\) This was a royal name, a name suitable for a leader who had aspirations to exercise authority in new territories.\(^ {68}\) Other Scandinavian leaders appear to have retained their Scandinavian names, yet at the same time their names were presented, in particular on coins, in an indigenous written form, using the Roman rather than the runes alphabet, and their names were latinized. The form of writing employed by a community has much to reveal about perceptions of language. The Scandinavians had a runescript but the absence of this script on coins minted in England – while it may have been due to moneyers accustomed to using Latin and to possible ecclesiastical involvement in minting coins – served to present successive Scandinavian rulers and kings in the mould of Christian, Anglo-Saxon kings.\(^ {69}\)

Many of the Scandinavian personal names recorded in documents of the tenth and eleventh centuries are rather different from the names found in Scandinavia. There is, for example, a much greater variety of compound names formed with -brandr, -grimr, -hildr, -steinn and -ulfr,


© Blackwell Publishers Ltd 2002 Early Medieval Europe 2002 11 (1)
and it appears that the settlers, and maybe also the indigenous population, both used existing Scandinavian names and created new names out of the individual elements of compound names. If the individuals who bore these names considered them to be Scandinavian names, then they were Scandinavian names with a difference, as the colonial context gave rise to new naming-practices.\(^70\)

The forms of names also reveal something about their chronological entry into England. Place-names sometimes contain personal names that had fallen out of favour in Scandinavia by the eleventh century, suggesting that they were comparatively early arrivals in England.\(^71\) The uncontracted form of personal names ending in \(-ketill\) have been shown by John Insley to have been virtually confined to East Anglia, whereas further north the contracted forms \(-kell\) or \(-kil\) are common, indicating adaptation to the more modern forms of names which developed in Scandinavia, and perhaps suggesting that individuals who bore such name forms were relatively recent immigrants or that their names had been influenced by newcomers.\(^72\) Scandinavian personal names eventually spread beyond those areas for which there is evidence of substantial Scandinavian settlement, and into those areas where there is little evidence of Scandinavian cultural influence. How long did Scandinavian personal names continue to be recognizable as such? The contemporary perception of personal names cannot have been simply a matter of etymology. Pronunciation, spelling (at least for the literate) and the associations which a name carried (genealogical, historical, legendary, familial and so on) must have served to determine the way in which individuals and their names were perceived.\(^73\) Some Scandinavian names may quickly have come to be regarded as elite names as much as Danish names, as they were borne by people in positions of authority. Outside the Danelaw, Scandinavian personal names seem to have been almost exclusively associated with the landowning elite.\(^74\) Social factors and ‘class’ differences, as much as ethnic factors, determined the choice of personal names.\(^75\)

\(^71\) Fellows Jensen, ‘Of Danes — and Thanes’.
\(^72\) J. Insley, ‘Regional Variation in Scandinavian Personal Nomenclature in England’, \textit{Nomina} 3 (1979), pp. 52–60, at pp. 56–7. The uncontracted form is also common in Normandy, where there is little evidence for on-going Scandinavian settlement.
\(^75\) Among moneyers continental Germanic names were popular at some mints in the tenth century. While this may signify an ongoing influx of continental moneyers, presumably in the
Sources of the tenth to fourteenth centuries record far fewer female than male Scandinavian personal names, which is doubtless a reflection of the smaller number of female settlers introducing fewer female names and naming models. Nonetheless, the fact that fifty-seven Scandinavian place-names recorded in Domesday Book have female names as their first element suggests that there were women bearing Scandinavian names in positions of authority at an early date, since only in unusual circumstances (such as widowhood or being the sole surviving heir) did women inherit land and hold on to it long enough for their names to become associated with the land. This may suggest that there were more female settlers than the personal name stock suggests. References in the Anglo-Saxon Chronicle indicate that the earliest raiders and settlers sometimes brought their wives and children with them. The Viking fortress at Benfleet (Essex) was captured in 893 including ‘both goods, and women and also children’, following which ‘the wif and two sons’ of their leader Hæsten were taken to King Alfred, and in 895 it was reported that ‘the Danes had placed their women in safety in East Anglia’. On the other hand, there is also evidence to suggest that the settlers sometimes married into indigenous families, perhaps for political or pragmatic reasons to secure their claims to land. For example, in 926 Sihtric, the Hiberno-Norse king of York, married a sister of King Athelstan of Wessex. It may be that marriage strategies were a significant means by which the Scandinavian settlers, the majority of whom appear on available evidence to have been men, secured their position and authority in England. There may be parallels to be drawn with the situation following Cnut’s conquest, when Cnut married first Ælfgifu, daughter of the former ealdorman of York, and then Emma, the widow of his predecessor, Æthelred II – a period when the enforced marriage of widows was a source of complaint. After the Norman Conquest, intermarriage was again an important means by which conquerors could secure title to land. The Scandinavians assimilated themselves to English society in part by involving themselves in the complex socio-political world of the places where they settled. This included

wake of the Scandinavian settlement, or that later moneyers with continental names were the descendants of earlier immigrants, it may also suggest that such names became regarded as suitable names for individuals born into that craft; indeed, some East Anglian coins show Old English and Scandinavian names presented in a continental guise (Semund may be either OE Sigemund or Scand. Sigmundr, and Grimo is Scand. GrõÂmr): V. Smart, ‘Scandinavian, Celts and Germans’, pp. 174–7.

76 Clarks, ‘Clark’s First Three Laws’, pp. 17–18.
78 Bately (ed.), Anglo-Saxon Chronicle, s.a. 893, 895.
79 Ibid., s.a. 926.
80 Ibid., s.a. 1017; Williams, The English and the Norman Conquest, pp. 199–202.

© Blackwell Publishers Ltd 2002
involvement both in their own and indigenous family rivalries and strategies, and in internecine warfare.81

Material culture

The presence of Scandinavian settlers has often been inferred from the distribution of distinctive forms and styles of material culture in northern and eastern England. These include artefacts brought from Scandinavia, forms of ornamentation common in Scandinavia, and motifs representative of aspects of Norse mythology (such as the Sigurd, Weland and Ragnarok scenes on stone sculpture, and the ravens and Thor’s hammers on coinage). Scandinavian settlement or influence is also commonly inferred where we find artefacts and motifs which have few or no precedents in Scandinavia but which are new to northern and eastern England in the tenth century and which may be indicative of Scandinavian influence, on the grounds that similar artefacts and motifs are found in other regions where Scandinavians are known to have raided, traded or settled. At York, for example, the following have been associated with Scandinavian activity: steatite bowls and vessels from the Shetland Islands; jewellery and dress accessories from Scotland and Ireland; lava quern stones from the Mayen region (Germany); pottery vessels from the Rhineland; twilled and dyed cloths of a type commonly found in Frisia; and Byzantine silk.82 Coinage and pottery influenced by Carolingian motifs and methods of production also seem to be associated with areas of Scandinavian activity in England.83 Certain types of wheel-heads on stone crosses, hogbacks, warrior figures and certain forms of animal ornamentation on sculpture, as well as bells, have also been used as evidence of Scandinavian influence even though they are not found in Scandinavia.84 It appears to be the case that the ‘colonial’ context gave rise to forms of material culture that were new and distinctive to both the settlers and indigenous society.

The production and display of monumental stone sculpture did not simply continue following the Scandinavian settlements but positively flourished, although there may have been bursts of sculptural production across northern England rather than constant production and a

82 Hall, Viking Age York, pp. 84–6.
gradual evolution of new styles. The scenes on a number of sculptures depicting tales from Norse mythology are no longer regarded as evidence that the Church was overwhelmed by paganism. Richard Bailey has observed that such scenes, which are few in number, could be interpreted as Christian teaching and art ‘being presented in Scandinavian terms’. For example, the image of Sigurd on a cross-shaft at Nunburnholme (Yorks.) mirrors the priest holding a chalice in the scene above, and this may have been a deliberate attempt to draw a parallel between the Eucharist (and enlightenment through taking the bread and wine) and Sigurd’s consumption of the dragon’s blood (leading to enlightenment about the plans of the villainous Regin). On a cross-shaft at Leeds (Yorks.), parallels may be being drawn between Weland, the flying smith, and St John, with his eagle and angels, and on a cross-shaft at Sherburn (Yorks.), between Weland and Christian saints with wings and birds. Some images might have been capable of diverse interpretation. For example, the figures in the midst of the snakes on various sculptures may have been intended to represent either Scandinavian myths or the dragons and leviathans of Isaiah, Job, the Psalms and Revelation, but could have been interpreted as either. Meanwhile, the figure with birds perched on his shoulder on a sculpture at Kirklevington (Yorks.) may have been understood as Odin, with his attendant ravens, or as a representation of the Christian peacock, a symbol of resurrection. Scenes depicting Ragnarok, the end of the Norse gods, are found on sculptures at Gosforth (Cumbria), Skipwith (Yorks.) and at Sockburn-on-Tees (Cleveland), and these may have been overtly pagan. Yet as a confident symbol of pagan beliefs these images hardly suffice, and they may just as plausibly have served as a marker of the successes of Christianity.

The creation and display of sculpture depicting warriors, heroic and mythological figures, and animals is understandable within an ecclesiastical environment. The extent to which the Anglo-Saxon church had absorbed the values of the nobility and their heroic ethos, and was able to do so again in the wake of the Scandinavian settlement, should not

---

85 J. Lang, ‘Recent Studies in the Pre-Conquest Sculpture of Northumbria’, pp. 186.
89 Ibid., p. 91.
be underestimated.91 Equally, the new warrior and heroic images, along-
side the great increase in production of sculpture, may indicate that the
patrons of stone sculpture in northern England were increasingly secular
lords, although lords whose power was based upon associations with the
church. The period was not, however, universally one of change, and at
some centres of sculptural production or display few concessions are
shown to new influences. This may reveal continuity in the patronage
of sculpture or it may even be an indication of a deliberate rejection
of Scandinavian cultural influence by members of regional polities
expressing shared cultural identity through the display of similar
iconographic schemes on stone sculpture.92

Sculpture did not simply passively reflect the ethnic identity of the
patron or sculptor, social relations or cultural change, but rather it was
created within a context in which patrons and sculptors experimented
with both old and new ideas, emulated sculptures from elsewhere and
displayed the status of the lord or church for whom the sculpture was
created. David Stocker and Paul Everson have recently argued that the
stone sculpture produced in northern Lincolnshire in the earlier part of
the tenth century had very close affiliations with that produced in York,
but that later, after incorporation into the English kingdom, a southern
influence may be observed.93 These transitions in sculptural motifs argu-
ably reflect the changing political map of the region, and they emphasize
the ways in which sculpture was both central to lordship and used to
convey messages over wide areas. Of course, sculpture may also have been
commissioned in a particular style because it was currently fashionable.
While we should not forget liturgical requirements, expression of lordly
status and the acquisition of the appropriate trappings of lordship were
arguably major factors in determining the types of sculpture produced.
That the sculpture was not chiefly an ethnic marker, or had ceased to be
one, is suggested by the fact that Scandinavian styles of the later tenth and
eleventh centuries did not become popular in northern England, and are
largely restricted to southern and eastern England.94

91 For an important parallel case concerning the equally problematic mixture of pagan and
Christian motifs in the poem Beowulf, see P. Wormald, ‘Bede, “Beowulf” and the Conversion
British Series 46 (Oxford, 1978), pp. 32–95, at p. 57; Bailey, Viking Age Sculpture, pp. 83–4;
idem, England’s Earliest Sculptors, pp. 77–94.
92 M. Firby and J.T. Lang, ‘The Pre-Conquest Sculpture at Stonegrave’, Yorkshire Archaeological
93 D. Stocker and P. Everson, ‘Five Towns Funerals: Decoding Diversity in Danelaw Stone
Sculpture’, in J. Graham-Campbell, R. Hall, J. Jesch and D. Parsons (eds.), Vikings and the
94 Bailey, England’s Earliest Sculptors, pp. 95–104; E. Roesdahl (ed.), The Vikings in England and
Their Danish Homeland (London, 1982), pp. 84, 180, 182–4; Graham-Campbell (ed.), Cultural

Early Medieval Europe 2002 11 (1) © Blackwell Publishers Ltd 2002
To what extent were the new forms of ornamentation on sculpture in the ninth and tenth centuries perceived of as Scandinavian? The Borre-style and Jelling-style interlace and animal motifs may initially have been clearly recognizable as Scandinavian, given that they would also have been visible on Scandinavian jewellery, weapons and dress- fittings. Animal art was the Scandinavian art form *par excellence* in this period. It has been suggested that in Scandinavia, especially in Denmark, this art form was utilized by rulers as a unifying political symbol rooted in the pagan religious universe, and initially developed as a countertype to the Christian Roman/Frankish universe in the fifth century. It has been suggested that by the Viking Age it was used in the construction of an identity serving to unify the Scandinavian kings, armies and clans as they raided across northern Europe.\(^95\) On the other hand, this form of ornamentation was quickly adopted on forms of material culture of non-Scandinavian origin: stone sculpture and disc brooches, for example. Moreover, the actual execution of the animal art on the sculpture of northern England was sometimes not especially proficient (such as the simple serpent on a cross at Middleton) and therefore, perhaps, not especially evocative of Scandinavian art forms, while at other times it drew on earlier English animal forms.\(^96\) Thus, while animal ornamentation may represent an attempt to signify a Scandinavian cultural or ethnic identity, its execution was dependent on indigenous art forms and craftsmanship, and it was displayed in juxtaposition with indigenous motifs.

If patrons and sculptors were looking back to past traditions in creating and displaying particular types of sculpture, they were looking back to a past that never quite existed, as they adapted it for a new context and audience. Many sculptures were ‘Scandinavian-like’, or evocative of the Scandinavian homelands or of indigenous Anglo-Saxon traditions, without being direct copies.\(^97\) The evocation of the past was transformed by the requirements of the present.\(^98\)

Scandinavian influence is also evident on metalwork, in particular jewellery and dress-fittings. Complex combinations of style and ornamentation are found on what are, in contrast to the sculpture, relatively personal artefacts and ones familiar to both indigenous peoples and settlers alike. This metalwork is likely to have been a medium susceptible to rapid transformation in the face of new cultural influences and through which cultural influences were readily disseminated. Strap-ends

\(^98\) For another post-Norman analogy, see Williams, *The English and the Norman Conquest*, pp. 155–86.
discovered at Coppergate and St Mary Bishophill Senior (York) are similar in form to Anglo-Saxon strap-ends, but are decorated in Borre style. The larger strap-ends indicate that traditional styles remained in use alongside strap-ends that display not only Scandinavian styles but also Carolingian and West Saxon influences. It is also apparent that different styles and designs were used contemporaneously by certain communities. Moulds for making different types of jewellery have also been found; hence, the artefacts cannot necessarily be regarded as imports, but could have been the products of local craftsmen working in a variety of styles. This evidence serves as a useful reminder that, although the presence of distinct ethnic and social groups may sometimes be marked by distributions of artefacts, the distribution of other forms of material culture does not necessarily respect such boundaries between groups. Moreover, the mixture of form derived from one tradition with ornamentation derived from another raises questions about whether different types of jewellery could have been understood as being ‘English’ or ‘Danish’, or as signifying anything about the ethnic identity of the wearer. Social status and gender may have been more important than ethnicity in determining what sorts of jewellery individuals wore.

Those who created artefacts produced them in a range of styles, and individuals and communities were presented with a choice about what they acquired, used, displayed and wore. Recent detailed work on cutting techniques, and the use of templates, has revealed that the same workshop could produce sculptures with radically different ornament and form, and the same appears to be true of metalwork. Whatever people wished to signify about themselves and their world in the later ninth and tenth centuries, they did not do so with reference to artefacts drawn exclusively from either Scandinavia or England. If indeed they signified their ethnic identity through the material culture they made and displayed (and we do not know for sure that they did), they commonly did so by adopting and adapting both familiar and newly-encountered forms and styles.

The relationship between the Scandinavian settlers and the Anglo-Saxon church has been discussed at length by many writers, and requires little more than a brief review here. The sculptural evidence cannot

---


stand alone as proof that any given church survived the Scandinavian settlements without disruption, but it does suggest that in the earlier part of the tenth century many churches of earlier foundation were still in use, even if after a period of disruption, and others may have been founded at this time. Clearly there were differences between the religious beliefs and practices of the indigenous populations and the newcomers, and there was undoubtedly disruption to the Anglo-Saxon church and an apparent crisis of confidence among some ecclesiastics. Nevertheless, the church, its socio-political context and the material culture with which it was associated, was ultimately of great importance for the integration of the settlers into indigenous society. A few documented examples of the conversion of Scandinavian kings provides more or less all that we know from written sources about the receptiveness of the settlers to Christianity. They give us no idea of how the followers of these kings responded, nor of how long it took for the society and modes of behaviour of the settlers to become ‘Christianized’, an undoubtedly more protracted process than the relatively immediate impact of baptism.

While there may have been ideological resistance to Christianity, and the settlers may have wanted to express their paganism, the evidence for this is comparatively scarce. The cremation burials at Heath Wood, Ingleby (Derbs.) provide, arguably, the clearest examples of this, as cremation, burial under barrows, animal sacrifice and ship symbolism combined to display, in the words of Julian Richards, ‘instability and insecurity of some sort … a statement of religious, political and military affiliation in unfamiliar and inhospitable surroundings’. The site is difficult to date, but has been interpreted as a relatively rare, early example (late ninth or early tenth century) of this sort of religious separatism. Why was this so rare? In order to answer this question we need to return to first principles. Burial practice is as much an expression of social status and ambition, made by the surviving members of the community or family, as it is an expression of religious affiliation; thus, there are serious problems attendant on making direct connections between religious belief and burial practice. Cremation, which can only certainly be identified at Heath Wood, is certainly not a form of

---


funerary treatment of which the church approved, but the more common inhumation with ‘grave goods’ is not a practice incompatible with Christianity, in spite of what is widely stated.\textsuperscript{107} The settlers may have made any manner of anti-Christian stances, but we cannot assess this on the basis of their funerary habits. The variety of burial practices and locations found in both England and Scandinavia in the ninth century makes the burials of the settlers difficult to identify, a problem compounded by the settlers’ rapid adoption of indigenous forms and locations of burial and commemoration in the form of stone sculpture.\textsuperscript{108} As the settlers sought to establish themselves in indigenous society, they appear quickly to have entered into the same arena of social expression through burial display and location as indigenous peoples, and this must account for the small number of cremations and inhumations with elaborate displays of grave goods.\textsuperscript{109} They had settled in a society where there were other elaborate, as well as more permanent and visible, means of commemorating the dead and of re-negotiating social organization in the light of the death of given individuals. Elaborate display in the ground only makes sense if there is a sizeable audience for whom the ritual has some meaning. In a context of settlement and of attempts to establish power in a situation in which the settlers were numerically in the minority and where indigenous support was necessary, a new ‘grammar of display’ was required.\textsuperscript{110} This at least was true for the elite, while ordinary people may not have been accustomed to having elaborate funerary rituals, to judge from contemporary evidence from Scandinavia.\textsuperscript{111}

Burial accompanied by grave goods was practised for a brief time in parts of England around 900; these consist of a small number of scattered burials accompanied by weapons, or items with agricultural or trading connotations, some of which were under barrows. All of these burials were of adults and, it appears, were mostly men, or at least contained items with strong masculine associations. This transitory display represents a brief return to the display of symbols of power in the grave which was prompted by the Scandinavian onslaught, but not

necessarily limited to the settlers, at a time of great stress in local power politics. Male burials and masculine symbolism were overwhelmingly used in the negotiation of social strategies through funerary displays, and this appears to have carried over to stone sculpture, where displays of weapons and symbols of elite male lordship are sometimes found amid scenes from heroic culture.\(^{112}\)

The hope is often raised that analysis of funerary evidence will eventually enable us to identify incoming groups in a particular region on the basis of their skeletal morphology or of their genetic make-up, or even that analysis of modern populations may enable us to do the same (through gene frequencies, distributions of blood groups and so on). This is, and is likely to remain, an unrealistic aim. Put simply, one cannot identify an individual Scandinavian, or an individual English person for that matter, on the basis of height, foot size, skull circumference, blood group or genetic characteristics.\(^{113}\) It may be possible to suggest on the basis of an extremely large (and, in an early medieval context, probably unobtainable) sample that certain populations demonstrate a greater or lesser affinity with other populations, and on this basis to draw some conclusions about the movements of peoples. It is also possible to identify whether individuals in a cemetery are related, and it may be possible in the future to distinguish cemeteries with a high percentage of related individuals, from ones with less evidence for familial relationships, in order to identify regions with higher percentages of outsiders in their cemeteries.\(^{114}\) However, even if this were possible, the evidence would not prove the newcomers were Scandinavian and the picture would only be relevant to a single generation, or until social mixing resulted in a mixed gene pool. Moreover, we must remember that genetic evidence does not tell us what cultural characteristics an individual or a group displayed.

### Conclusions

Documentary, linguistic and archaeological evidence may be interpreted to suggest that the Scandinavian settlers had a major impact on the society and culture of northern and eastern England, but that impact was not uniform. Moreover, so many of the visible expressions of ‘Danishness’ were determined not so much by the scale of the settlement, as by


\(^{113}\) The literature on this subject is extensive: for a review, see M.P. Evison, “‘All in the Genes’: Evaluating the Biological Evidence for Contact and Migration’, in Hadley and Richards (eds.), *Cultures in Contact*, pp. 277–94.

the political and cultural manipulation of ‘Danishness’ by the elites of the Danelaw. Ethnic identity became a ‘live’ issue only at certain times, and, at least in the evidence available to us, was not fundamentally determined by the scale of the settlement. A relatively unsophisticated paradigm for the nature of ethnicity has long prevailed in the study of the Scandinavian settlements, and is in need of revision. Not only must we examine the ways in which ethnic identities were constructed in the early Middle Ages, but we must also explore the multifarious ways in which material culture, language and text were utilized in the process. We must also remember that ethnicity is not the only relevant paradigm for the discussion of the Scandinavian settlement. Issues relating to lordship, politics and gender are all relevant to our understanding of the Scandinavian settlements, as they are, of course, to any aspect of early medieval social life.

Department of Archaeology and Prehistory, University of Sheffield